Publications Committee

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UNIVERSITY OF TEXAS,

AUSTIN, TEXAS.

CIRCULAR No. 3.] AUGUST, 1885.

CHEMICAL LABORATORY.

At a meeting of the Board of Regents, in June, 1885, the whole of the lower floor of the University Building was set aside for the School of Chemistry. As will be seen by reference to the accompanying diagram, the floor consists of five large and six small rooms. The large rooms are used for an assay laboratory, a general laboratory, a store room, a lecture room, and a private laboratory. The small rooms are fitted up for balance room, evaporating room, etc. A sufficient sum of money was appropriated for fitting up these various rooms and for the purchase of additional apparatus. This additional apparatus, together with that already on hand, makes the School of Chemistry of this University one of the best equipped in the country.

The laboratories are large and well ventilated. All the appliances are adapted to thorough practical work, and facilities are offered students for making almost any kind of chemical investigation. The apparatus has been purchased from the best makers in this country and in Europe.

The floor on which the laboratories are situated is shut off from the upper portion of the building by a partition. It is traversed by a hall (A) 14 feet wide and 100 feet long, on each side of which are doors opening into the various rooms, as is shown on the diagram. Along the walls of the hall are arranged cases with glass doors, in which is kept the collection of minerals and ores.

The assay laboratory (B) is 26x33 feet, and is well ventilated by eight windows, and has been rendered fire-proof by a cement floor and by painting the wood work with asbestos paint. It is provided with an ordinary laboratory desk capable of accommodating ten students. This desk is furnished with suitable gas and water fixtures. There are in this laboratory two assay furnaces and one crucible furnace for coal; one Fletcher's assay furnace for gas; Fletcher's injector gas furnaces for producing extremely high temperatures; a Blake's ore crusher; ore pulverizers; balances, etc.

Next to the assay laboratory, on the same side of the hall, is the general laboratory (C) for students, a room 29x58 feet. This room is ventilated by

seven large windows and two doors, and has one large hood 28 feet long closed in with movable glass doors. Under this hood all evaporations take place, and the acid and other noxious fumes are carried off through two chimneys in which gas jets are burned to assist the draft. Both gas and water fixtures are under this hood, the latter being arranged for purposes of distillation. The general laboratory is provided with six desks 12 feet long and 5½ feet wide, each accommodating six students, three on a side. These desks have drawers and cupboards, so that each student can keep his apparatus locked up, and are further provided with shelves for reagents, gas and water fixtures, and also with exhaust pumps for quick filtration. To every three desks there are two lead-lined sinks. At one end of the room there is a large table fitted with blast lamps, etc., for glass blowing, and also with drying ovens and sand baths.

A small room (G), 8x18 feet, opening into the general laboratory, is fitted up for the preparation of hydrogen sulphide, chlorine and like gases. It is provided with gas and water fixtures, hood, a large hydrogen sulphide generator and other necessary appliances.

Another small room (H). 8x10 feet, opening also into the general laboratory, is used for sugar analysis. It is provided with the necessary gas fixtures. The apparatus for sugar analysis is very complete, embracing, besides other apparatus, a very fine half shade polariscope (Dr. Scheibler's) with all the accessories.

The store room (D), 26x32 feet, situated on the opposite side of the hall, as is shown by the diagram, is provided with shelving to hold all the apparatus and chemicals not in constant use. In this room, and connecting with the lecture room by pipes, are two large gas reservoirs, one for oxygen, the other for hydrogen. These reservoirs contain each about 100 cubic feet, and are made like the ordinary gas holders of gas works, having a water seal and having the pressure regulated by weights and pulleys.

The lecture room (E), 26x33 feet, is next to the store room. It can seat about 60 students. It has all necessary appliances, as tables, closets, pneumatic trough, etc. The lecture table is provided with gas and water fixtures and with stop cocks for oxygen and hydrogen, connecting with the reservoirs in the store room.

The private laboratory of the Professor of Chemistry (F) is 26x33 feet, and corresponds to the assay laboratory on the opposite side of the hall. It is well lighted and ventilated. It is provided with all necessary appliances, such as gas and water fixtures, sinks, laboratory desks, glass-blowing table, exhaust and condensing pumps, sand baths, drying ovens, closets, etc. It has all the apparatus necessary for the prosecution of theoretical investigations or for technological work.

The balance room (K), 8x20 feet, is alongside of the private laboratory. It is provided with seven fine Becker balances, including an assay balance.

A small room (M) 6x8 feet, next to the balance room, is fitted up as a spectroscope room. Two spectroscopes are used, one a moderately fine in-

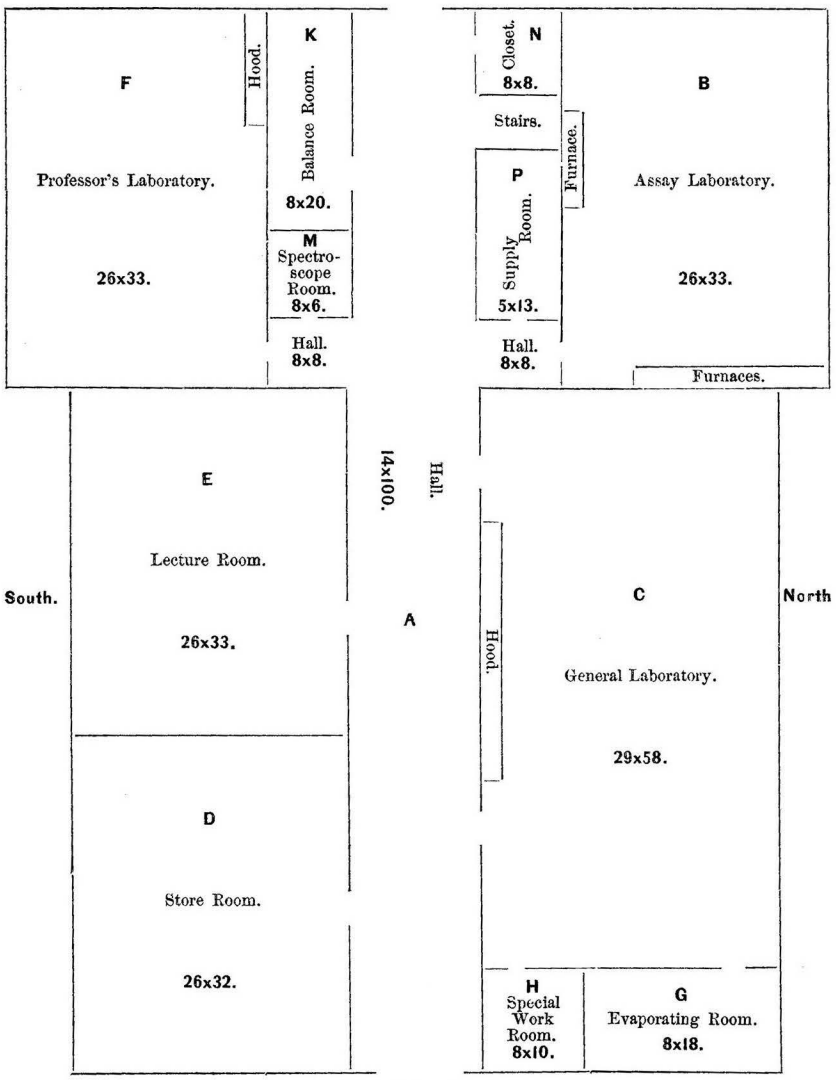
strument, the other a large combination spectroscope recently ordered from Europe.

The two small rooms (N and P) next to the assay laboratory are used for storage.

The School of Chemistry is furnished with the most recent and complete apparatus made. Besides the apparatus ordinarily used for lecture illustration, there is a complete set of Hofmann's lecture apparatus, as well as that of Bunsen and others. In addition may be mentioned Hempel's apparatus for gas analysis; Scheibler's, for the estimation of carbonic acid in animal charcoal; Noebell's, for soil analysis; Sprengel's and Geissler's mercury pumps; explosion ovens, combustion furnaces, electric batteries, filter presses, etc.

The School of Chemistry possesses a small but well selected library of 300 or 400 volumes, embracing some of the best German, French and English journals and books. This library is accessible to the students at all times.

EDGAR EVERHART, A. M. PH. D.,
Professor in Charge.


F
Professor's Laboratory.
26x33.
Hood.
K
Balance Room.
8x20.
M
Spectro-scope Room.
8x6.
Hall.
8x8.
Closet.
N
8x8.
Stairs.
P
Supply Room.
5x13.
Hall.
8x8.
Furnace.
B
Assay Laboratory.
26x33.
Furnaces.
E
Lecture Room.
26x33.
D
Store Room.
26x32.
14x100.
Hall.
A
South.
Hood.
C
General Laboratory.
29x58.
North
H
Special Work Room.
8x10.
G
Evaporating Room.
8x18.

GROUND PLAN.